



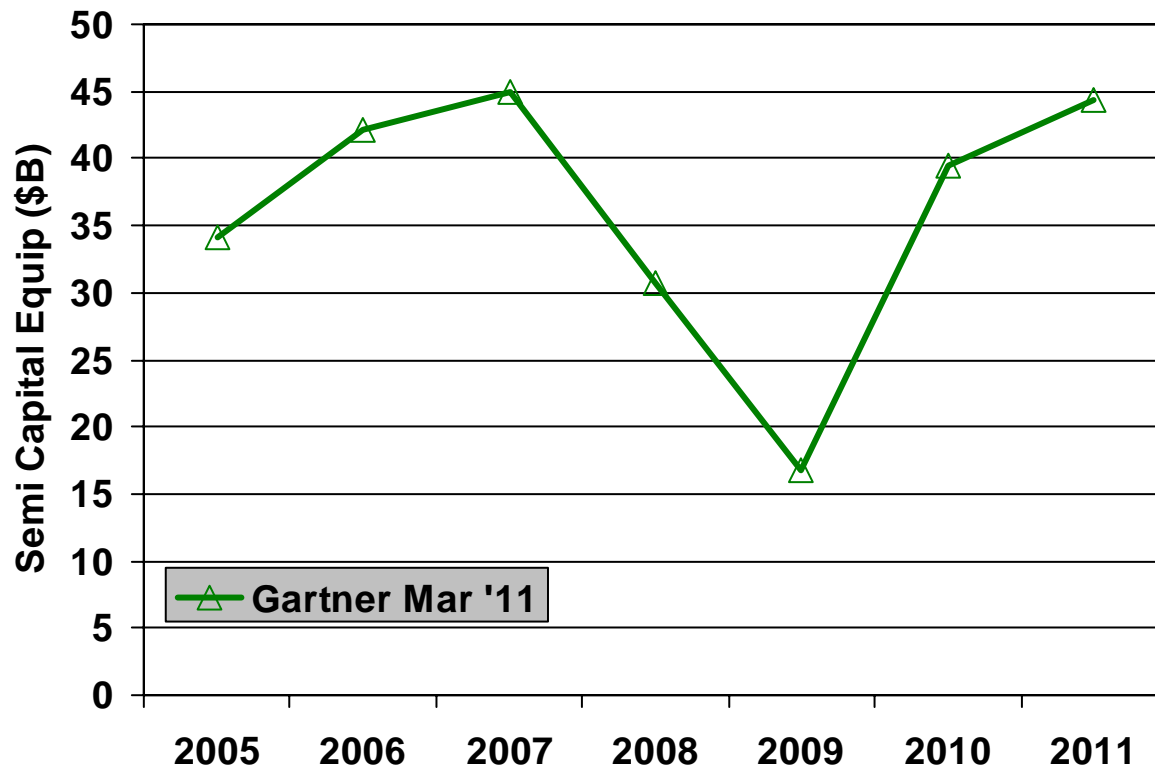
**ASMI Annual Meeting of Shareholders
May 23 2011**

**Chuck del Prado
President & CEO**

All matters discussed in this business and strategy update, except for any historical data, are forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. These include, but are not limited to, economic conditions and trends in the semiconductor industry generally and the timing of the industry cycles specifically, currency fluctuations, the success of restructurings, the timing of significant orders, market acceptance of new products, competitive factors, litigation involving intellectual property, shareholder and other issues, commercial and economic disruption due to natural disasters, terrorist activity, armed conflict or political instability, epidemics and other risks indicated in the Company's filings from time to time with the U.S. Securities and Exchange Commission. All statements are made as of the date provided and we assume no obligation nor intend to update or revise any forward-looking statements to reflect future developments or circumstances.

- **Semiconductor Equipment Market in 2010**
- **ASMI Results in 2010**
- **Status ASMI Back-end**
 - Results
 - Products & Business highlights
- **Status ASMI Front-end**
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- **Market Outlook and Conclusions**

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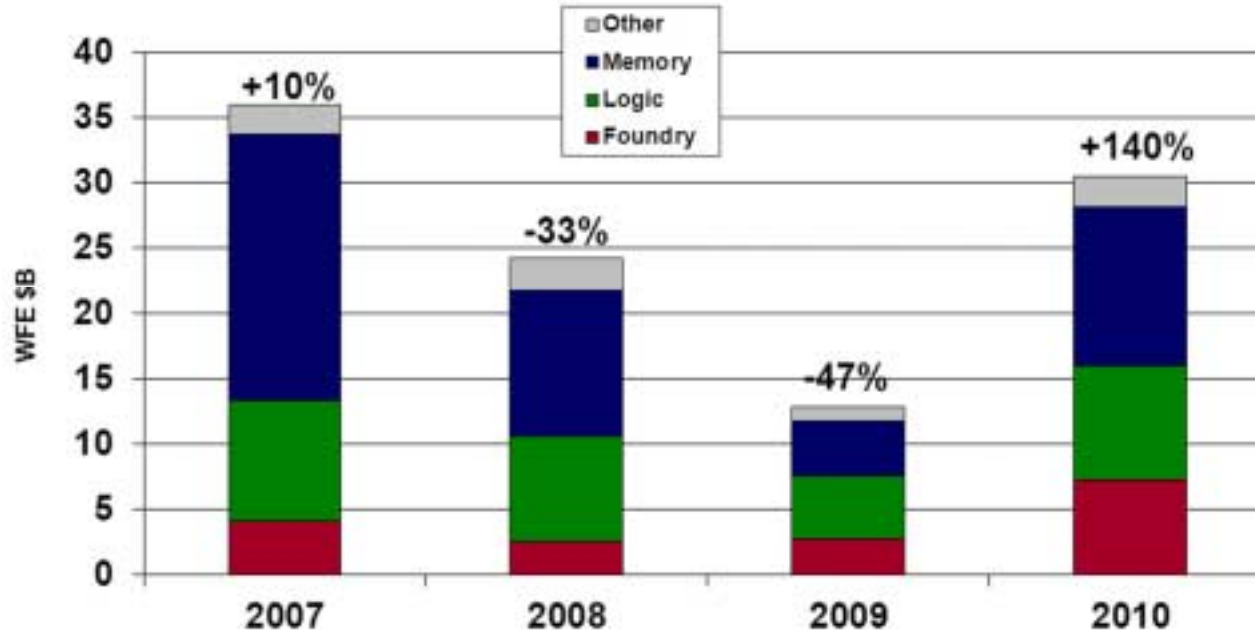


Semi Capital Equipment Year to Year Growth	
2007-2008	-31.6%
2008-2009	-45.8%
2009-2010	+137.1%
2010-2011	+12.4%

- **Global recession starting in 2H08, leading to 2009 Semi Equipment to be down by 63% relative to 2007**
- **In 2010 Semi Equipment spending jumped back up significantly and predicted to closely approach the 2007 level again in 2011**

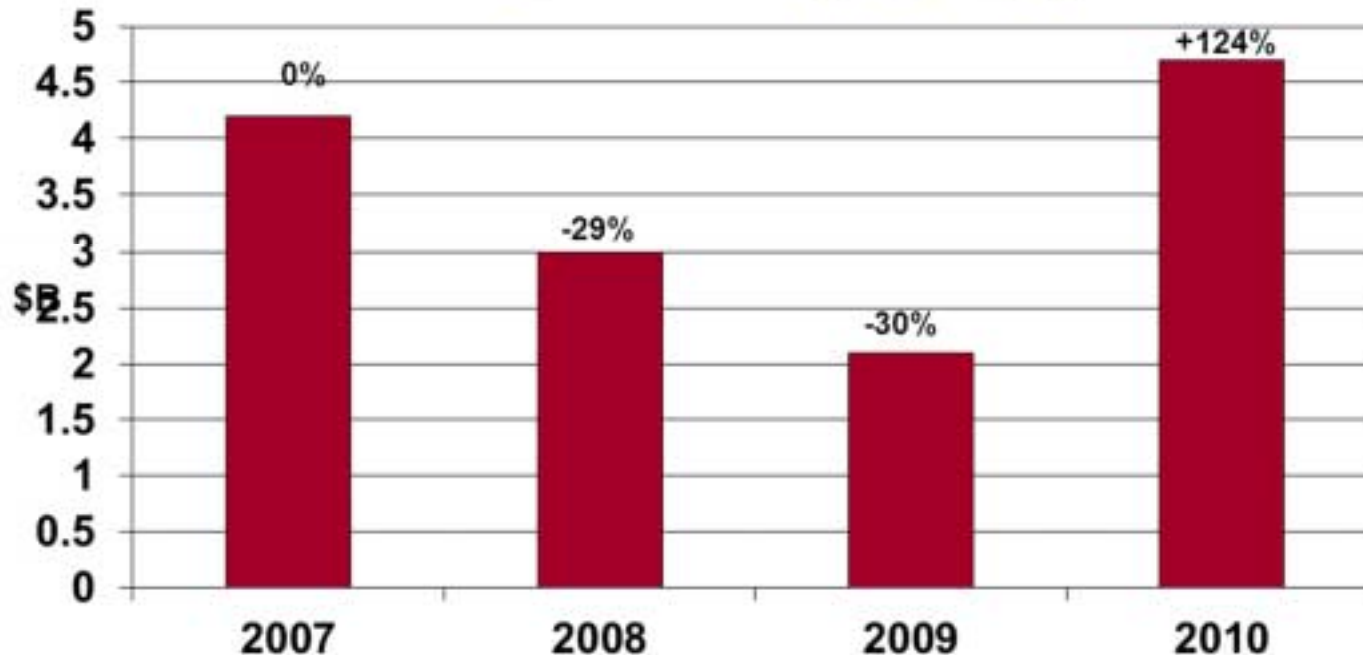
Wafer Fab Equipment recovered strongly in 2010

Wafer Fab Equipment by device type



- 2010 WFE spending increased 140%
- Foundry only segment with growth in 2009
- In 2010, growth led by foundry and memory

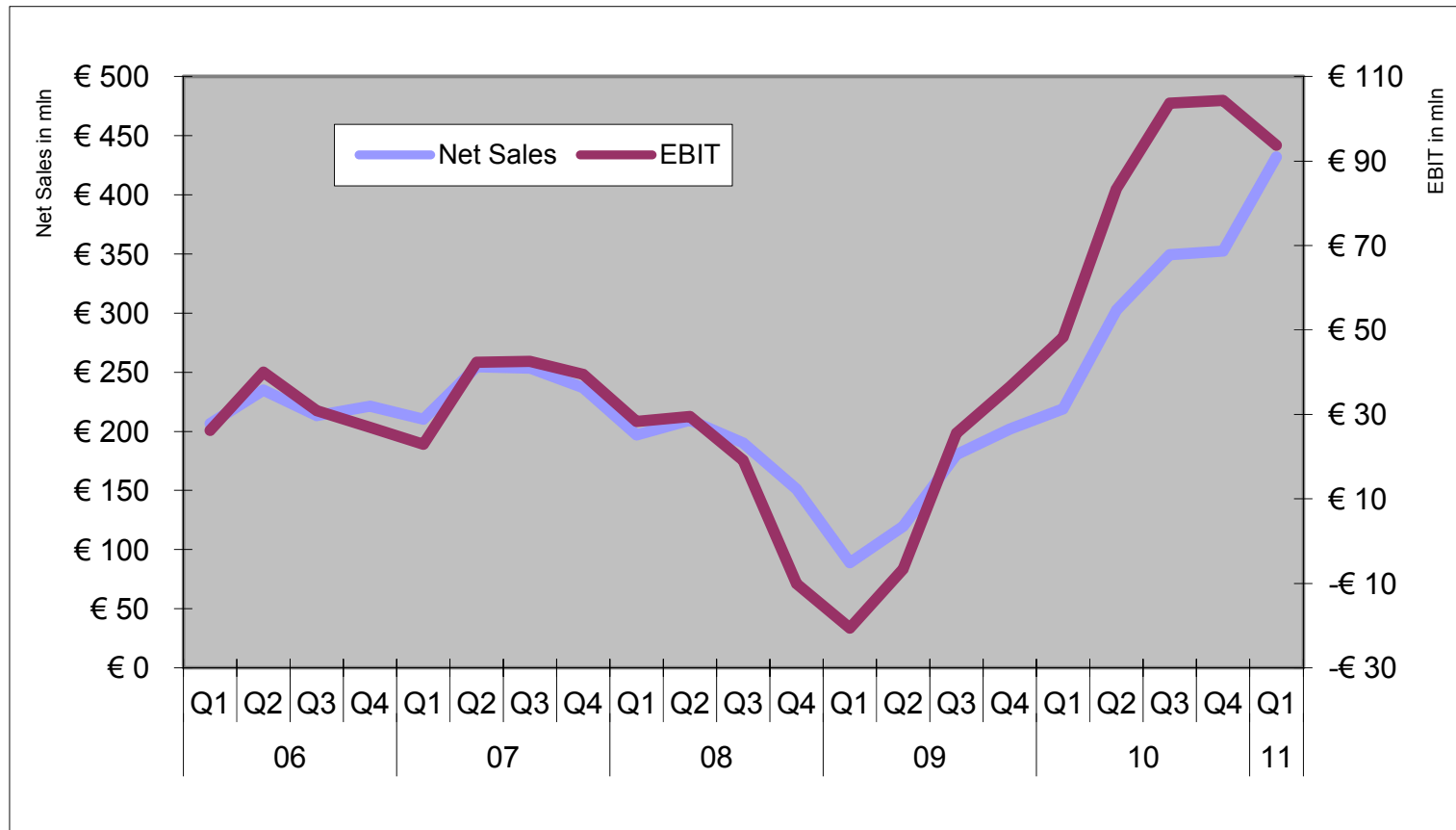
Assembly and Packaging Equipment



- 2010 Assembly and Packaging Equipment spending increased 124%
- Growth occurred in both IDMs and Subcons/SATS
- LED-market was very strong in 2nd half 2009 and 2010

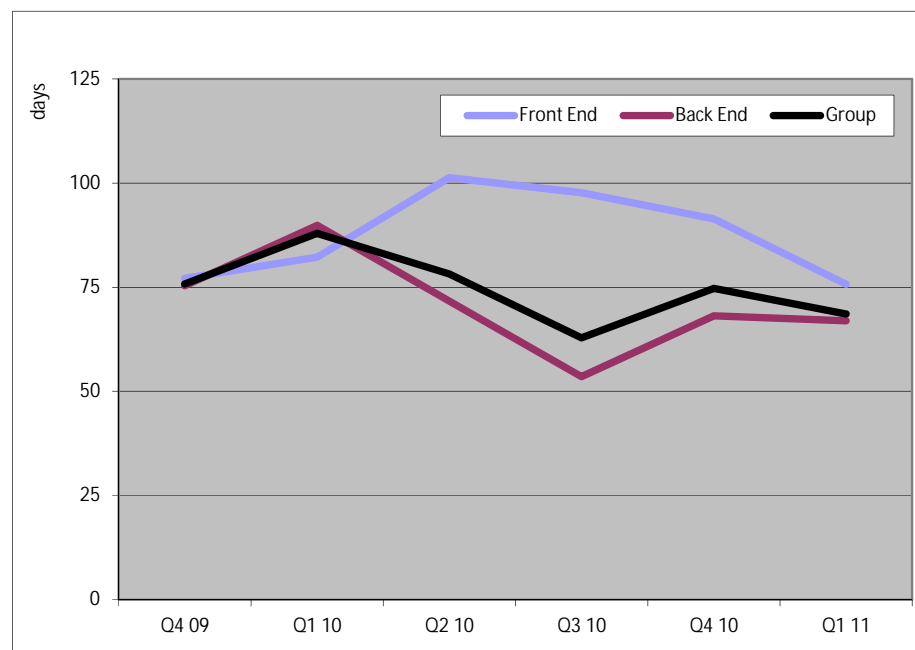
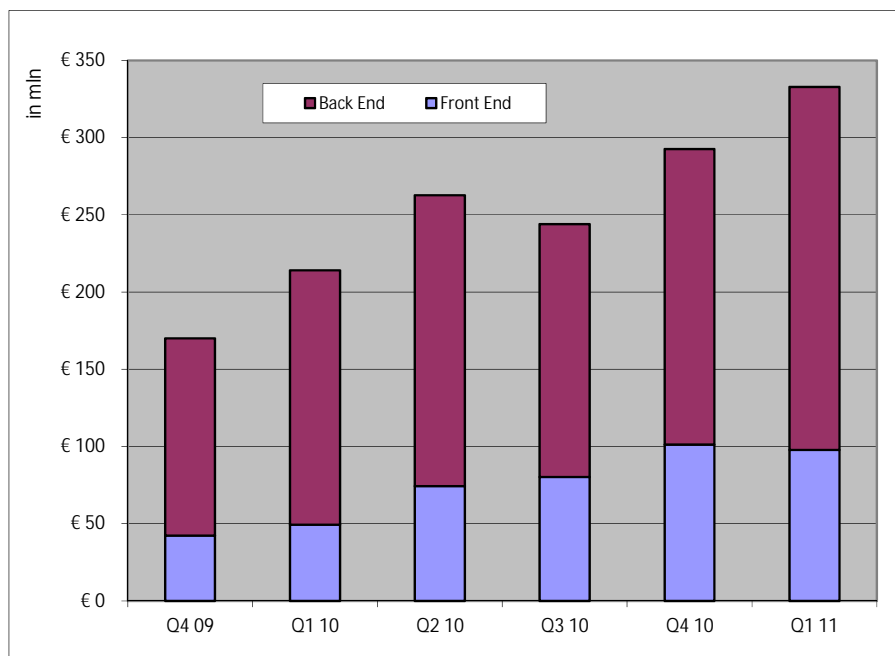
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- **Revenues up 107% y-o-y**
 - In FE sales grew 83% y-o-y, driven by inroads in Foundries and Memory and increased orders for especially (PE)ALD and EPI
 - In BE sales increased 116% y-o-y, in both IC/Discrete and LED
- **Q4 Back log Euro 499 M at the end of 2010 (1.4 X Q4 sales)**
- **EBIT margin of 28% as compared to 6% in 2009**
 - FE EBIT margin improved toward end of 2010 to 14% driven by our PERFORM! Program
- **Cash flow from operations increased from Euro 63 M in 2009 to Euro 260 M in 2010**
 - Proposal to ASMI AGM to declare Euro 0.40 dividend per share
- **Net earnings of Euro 111 million**
 - Up from negative Euro 107 million in 2009
 - Front end (excl. revaluation convertible) became profitable again in Q4



€ million	Full Year 2009	Full Year 2010	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011
Front End	160.4	293.4	54.0	66.1	73.8	99.6	116.1
Back End	430.4	929.5	165.1	236.4	275.4	252.7	316.1
Net Sales	590.7	1,222.9	219.1	302.4	349.2	352.2	432.2
Gross Margin	208.0	549.6	93.1	133.4	161.8	161.3	165.5
<i>as % of sales</i>	<i>35.2%</i>	<i>44.9%</i>	<i>42.5%</i>	<i>44.1%</i>	<i>46.3%</i>	<i>45.8%</i>	<i>38.3%</i>
Selling, general and administrative	(108.1)	(131.1)	(27.4)	(31.8)	(37.3)	(34.6)	(42.5)
Research and development	(62.8)	(78.8)	(17.5)	(18.2)	(20.8)	(22.3)	(29.5)
Front End	(58.0)	26.9	(1.4)	6.9	7.2	14.3	18.6
Back End (100%)	95.1	312.8	49.7	76.6	96.5	90.1	75.0
EBIT (excl. restructuring)	37.1	339.7	48.3	83.4	103.7	104.3	93.6
<i>in % of sales</i>	<i>6.3%</i>	<i>27.8%</i>	<i>22.0%</i>	<i>27.6%</i>	<i>29.7%</i>	<i>29.6%</i>	<i>21.6%</i>
Restructuring expenses	(62.2)	(11.2)	(3.6)	(3.3)	(2.4)	(1.8)	0.0
Front End	(151.5)	(35.7)	(18.6)	12.1	(11.2)	(18.1)	7.0
Back End (ASMI interest)	45.0	146.3	22.7	35.4	45.5	42.7	33.1
Net Result	(106.6)	110.6	4.2	47.5	34.3	24.7	40.1

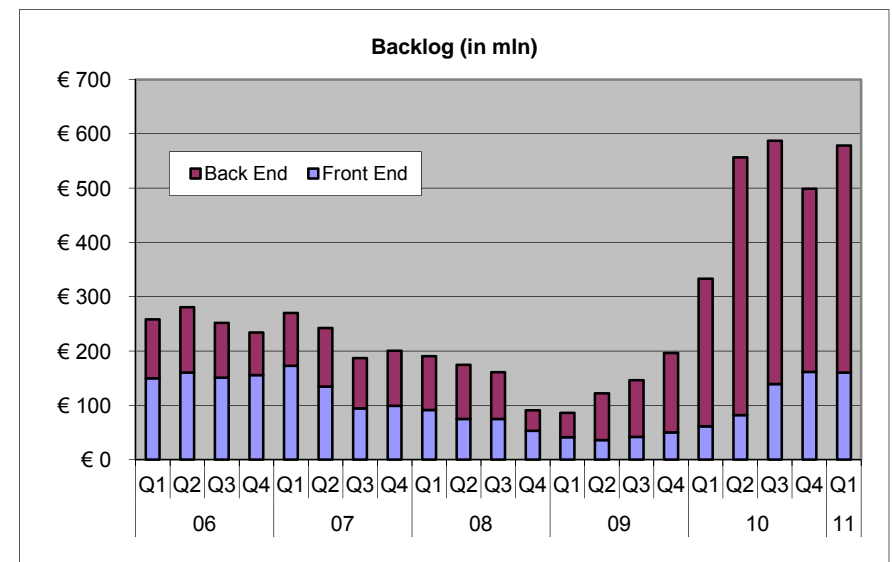
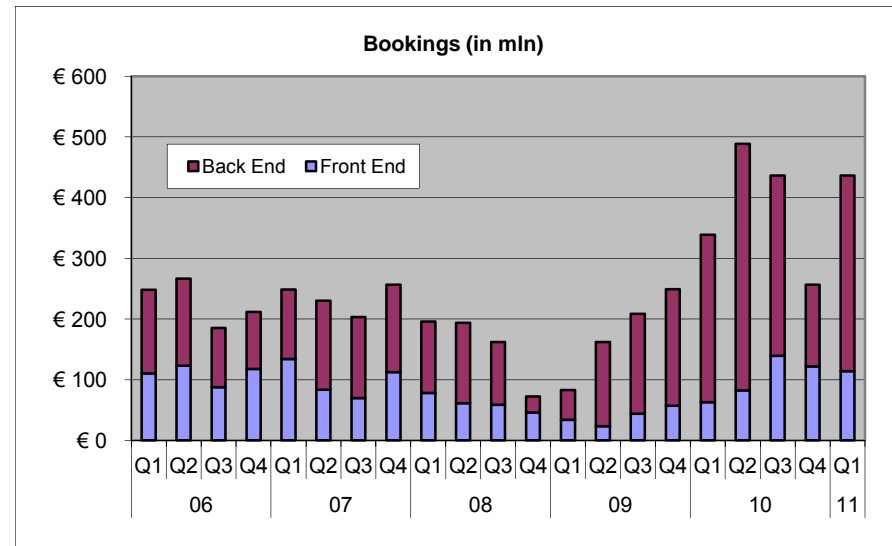
Increasing working capital in Front End and Back End due to higher activity levels



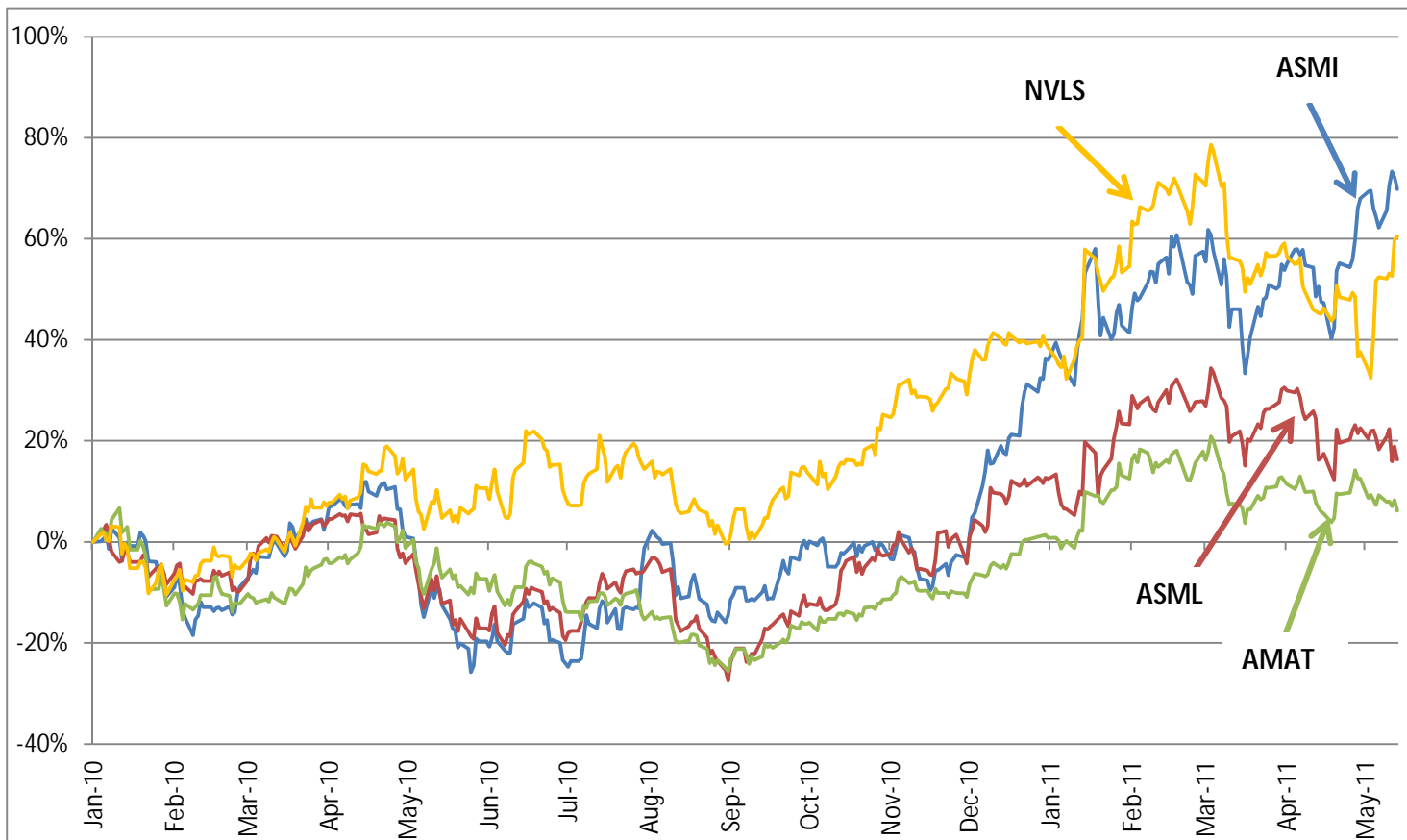
€ million	Full Year 2009	Full Year 2010	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011
Net earnings (loss)	(68.3)	242.5	24.7	79.4	75.3	63.2	70.2
Depreciation	36.4	35.8	8.2	8.8	9.2	9.5	12.2
Working Capital	36.2	(88.9)	(18.2)	(24.7)	(7.8)	(38.1)	(4.9)
Restructuring & impairments	55.5	1.9	0.9	1.1	0.4	(0.5)	(1.7)
Others	2.9	68.5	10.2	(3.4)	23.2	38.5	8.3
Net cash from operating activities	62.7	259.9	25.8	61.2	100.3	72.6	84.0
Net cash from investing activities	(15.5)	(100.6)	(10.7)	(19.3)	(32.4)	(38.1)	(22.4)
Net cash from financing activities	90.9	(123.0)	(40.2)	(30.4)	(42.0)	(10.3)	76.7
Exchange rate effects	(1.4)	10.1	10.3	17.8	(21.5)	3.6	(13.1)
Net increase (decrease) in cash and cash equivalents	136.6	46.4	(14.9)	29.2	4.4	27.7	125.2

All time high bookings in 2010 in both Front end and Back end. Book to Bill ratio in 2010 of 1.2, Book-to-Bill ratio of 1.0 in Q1 2011.

Backlog increased from €197m at end of 2009, to €499m at end of 2010 and further to €579m in Q1 2011.

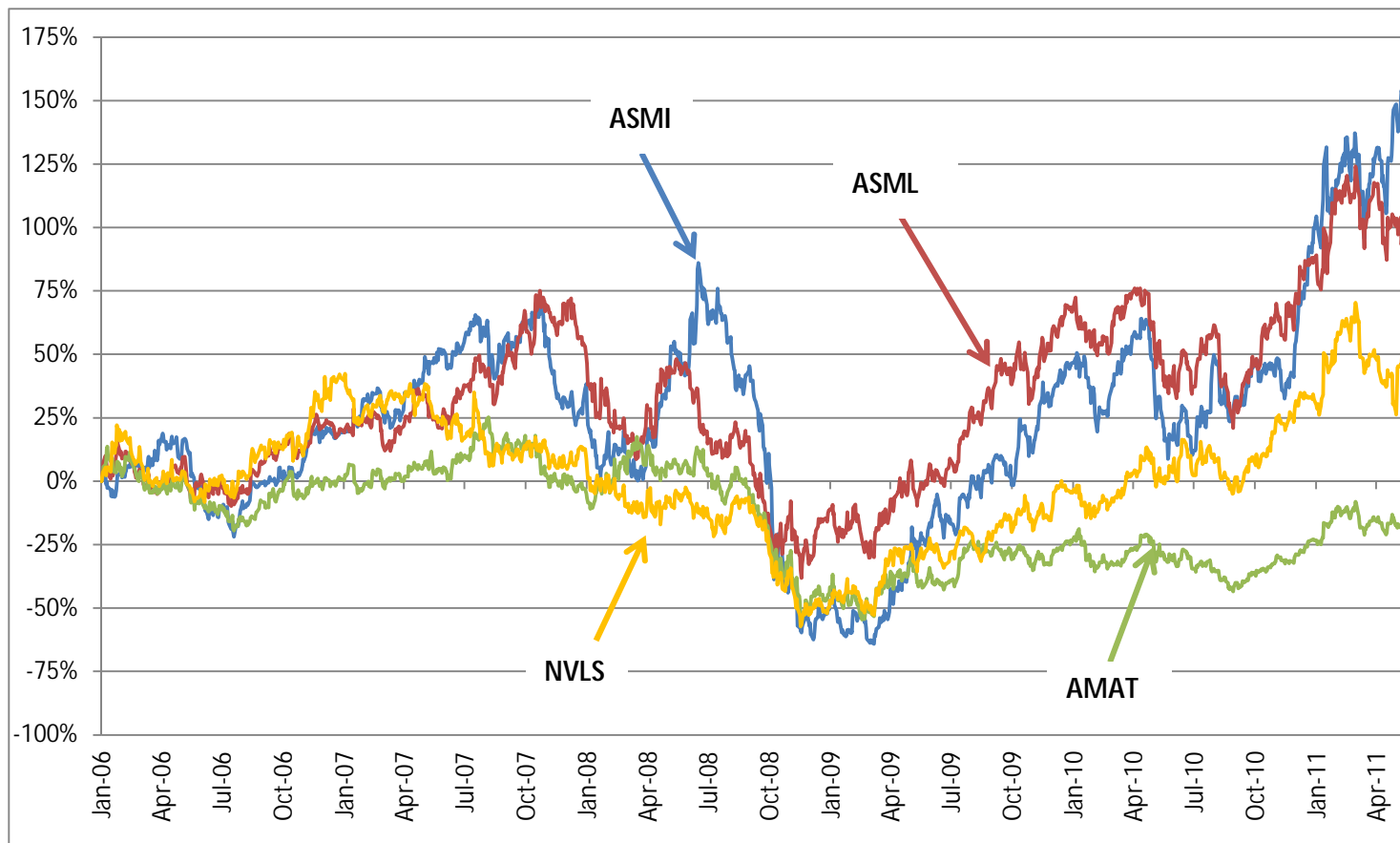


Usage of Dividends ASMPT(Euro M)	Dividends Received	ASMI shares Repurchased	Convertible Bonds Repurchased	Dividend pay outs	Balance
2007	49.1		-32.9	-5.4	10.8
2008	49.1	-36.5	-27.1		-14.5
2009	21.4		-27.0		-5.6
2010	65.6		-55.8		9.8
Total	185.2	-36.5	-142.8	-5.4	0.5



Source: google.com/finance

- **ASMI share price increased 36% in 2010**
- **Comparison same sector companies**



Source: google.com/finance

ASMI share price increased > 100% (end of 2010) compared to 2006

Health and Safety

- Active safety programs in Front-end on Lock-out Tag-out of hazardous energies and Ergonomics
- Health and Safety management at Front-end Manufacturing Singapore to next level
- Continued low Recordable Case Rate (per 100 FTEs):
 Front-End: **0.47** (0.52 in 2009) Back-End: **0.62** (0.47 in 2009)

Environment

- Design of FEMS fab expansion with 19% lower annual electrical power consumption compared with conventional fab design
- Improved waste program in Phoenix, Almere and Tokyo

Sustainable applications/products

- Back-end active in LED market
- Company products contributing to automotive hybrids
- Company assessing solar market

Code of Conduct

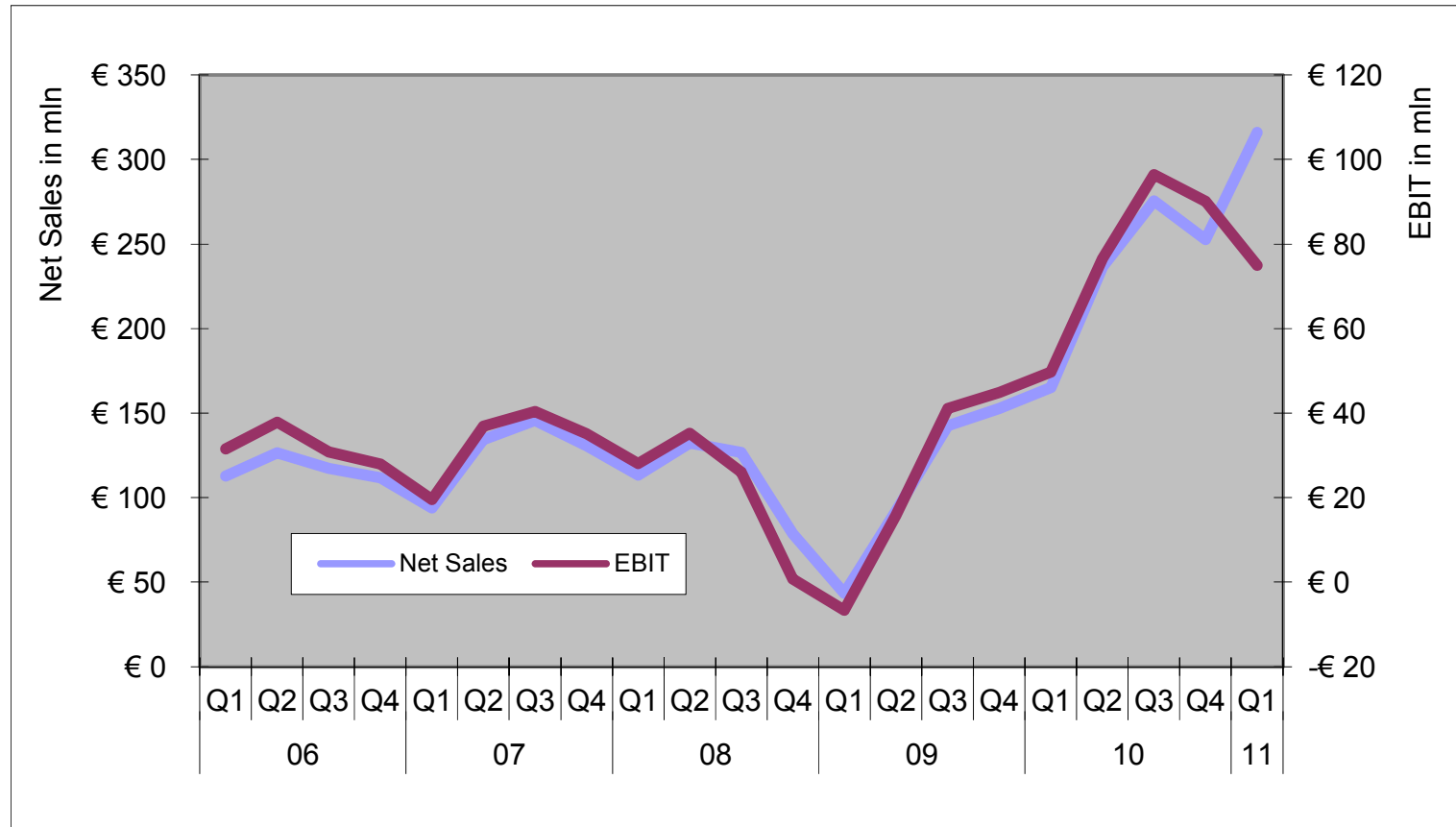
- Selected suppliers filled out self assessment in area of ethics and labor, final responses were received in 2010.
- Started roll-out Corporate Compliance refresher training module covering code of ethics

Plans 2011

- Evaluation of supplier responses to self assessment and audits of selected suppliers
- Aim to have Corporate Social Responsibility implementation plan available in 2011.

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BE Sales and Profit reached top levels in 2010, EBIT decrease in Q1 2011 due to seasonality of existing business and mix

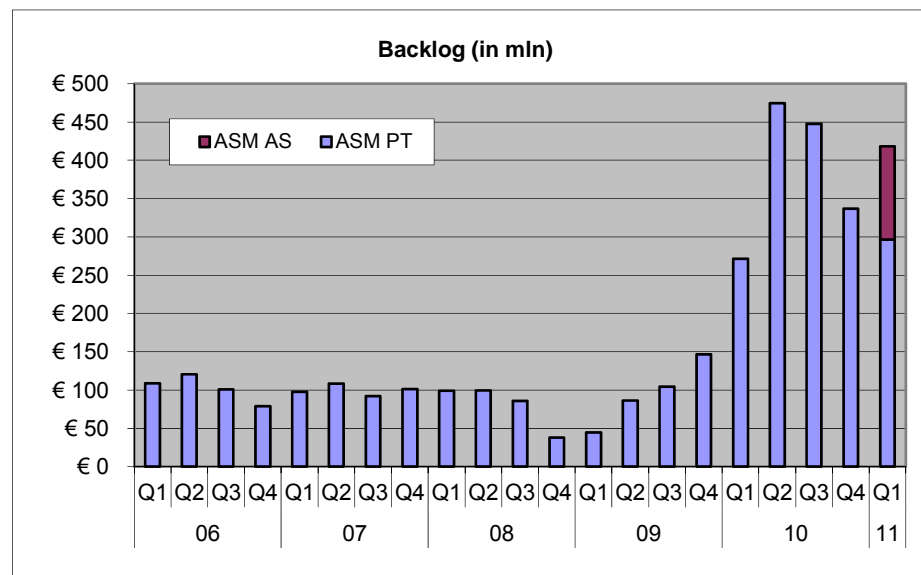
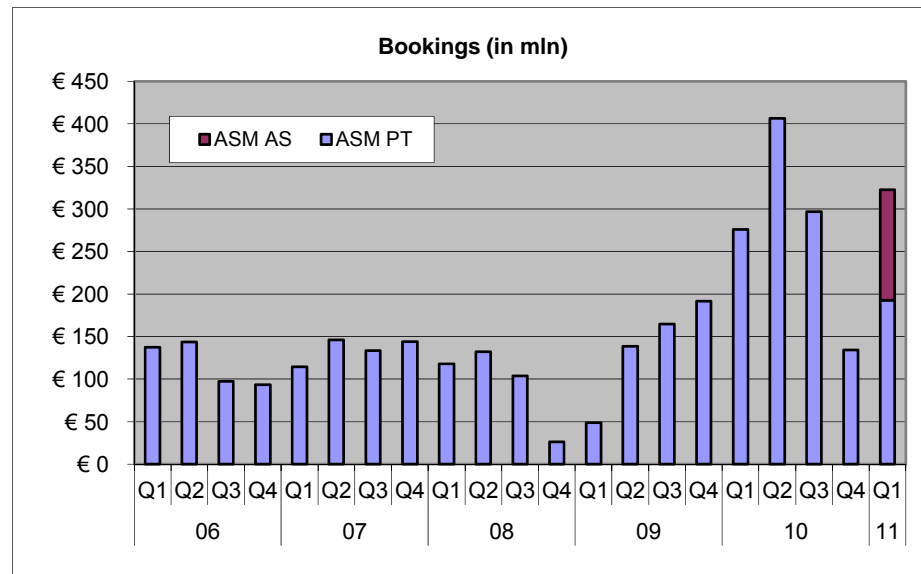


2010: Quarter on quarter EBIT% improvements

€ million	Full Year 2009	Full Year 2010	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011
Net Sales	430.4	929.5	165.1	236.4	275.4	252.7	316.1
Gross Margin <i>as % of sales</i>	172.8 40.1%	435.0 46.8%	74.5 45.1%	107.3 45.4%	132.4 48.1%	120.7 47.8%	120.0 38.0%
S, G & A	(49.3)	(79.9)	(15.6)	(20.4)	(24.4)	(19.5)	(26.8)
R & D	(28.4)	(42.3)	(9.2)	(10.3)	(11.6)	(11.1)	(18.2)
EBIT (excl. restructuring) <i>as % of sales</i>	95.1 22.1%	312.8 33.6%	49.7 30.1%	76.6 32.4%	96.5 35.0%	90.1 35.6%	75.0 23.7%
Bookings	544	1,113	276	406	297	134	323
Book-to-Bill	1.3	1.2	1.7	1.7	1.1	0.5	1.0

Book-to-Bill ratio in 2010 was 1.2. Q1 2011 shows a Book to Bill ratio of 1.0

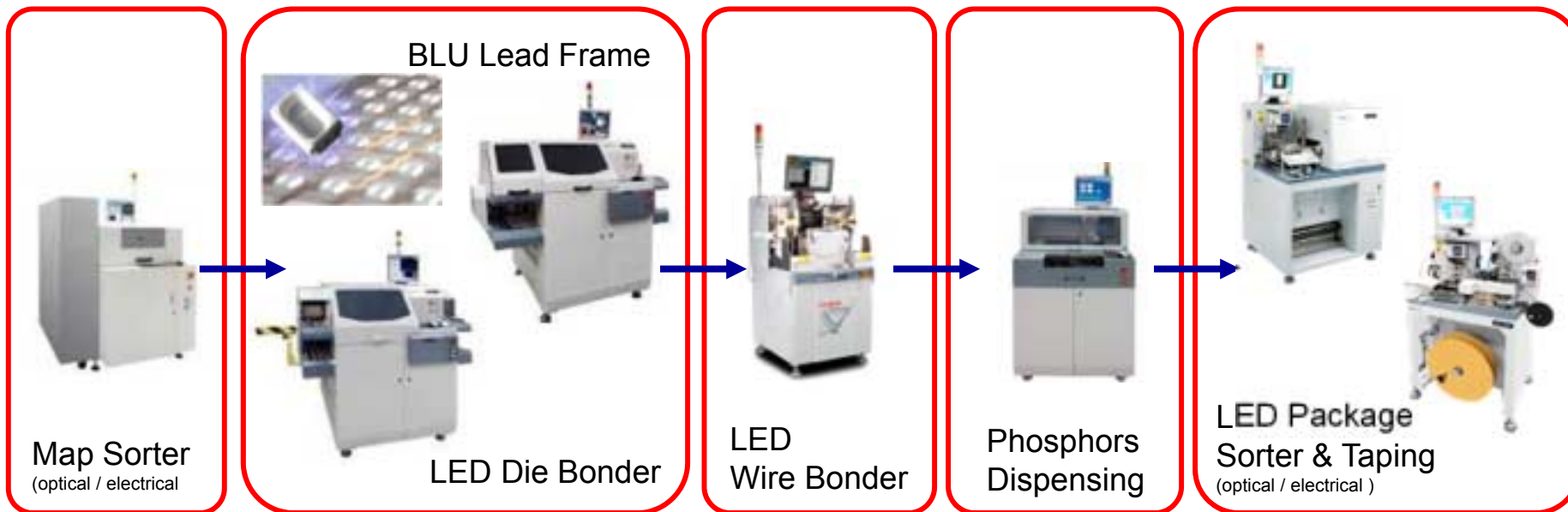
Backlog increased with 130% in 2010 from €146m to €337m and to €420m at the end of Q1 2011.

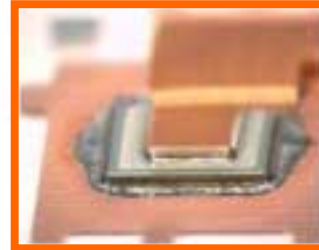


- **ASM acquired SMT (SEAS) activities, re-named ASM-AS, from Siemens by January 7, 2011**
- **ASM-AS immediately EBIT accretive in Q1, albeit at lower level than existing PT activities**
- **Purchase price accounting (PPA) approach, will lead to one off profit expected to be recognized in 2nd half 2011, exact amount is yet to be finalized**
- **Focus on ASM-AS gross margin improvements in coming years through BE's existing low cost MFG/Supply Chain infrastructure in Asia**
- **Market-synergies addressed later**

IC manufacturing - LED manufacturing - Surface Mount Technology

Market	Application	ASM Relative Positioning
<p>IC manufacturing</p> <ul style="list-style-type: none"> • Assembly tools • Packaging tools • Inspection tools • Test handling tools 	<ul style="list-style-type: none"> • Die bonding • Wire bonding • Moulding • Trim & Form, singulation • Vision and Inspection • Test Handler • In-line automation • L/F's 	<ul style="list-style-type: none"> ✓ #1 in the equipment market ✓ Qualified by most IDM's and Subcontractors' ✓ Strong process and package know how ✓ Strong local service and support organization
<p>LED manufacturing</p> <ul style="list-style-type: none"> • Assembly tools • Die & package sorting tools • Packaging tools • Testing tools 	<ul style="list-style-type: none"> • Die bonding • Wire bonding • Die coating • Moulding • Singulation • Sorting • Testing • L/F's 	<ul style="list-style-type: none"> ✓ #1 in the bonding market ✓ Total solution approach ✓ Strong process and package know how ✓ Strong local service and support organization
<p>SMT</p> <ul style="list-style-type: none"> • Placement tools • Software solution 	<ul style="list-style-type: none"> • Pick & Place 	<ul style="list-style-type: none"> ✓ ASM #3 worldwide, #1 in Europe with >50% market share ✓ Leading position in High-end tools ✓ Strong software solution





eClip
Automatic Clip Bonding
System



HA501
Automatic Heavy
Aluminum Bonding
System



Micro SD card



SD card

- **ASMPT continued growing faster than market**
 - Continued its #1 position in the IC Assembly & Packaging market
 - Successfully expanded in LED market and now the only supplier to offer a total solution
 - Entered adjacent market (Surface Mount Technology), advantages:
 - Enables ASMPT to bring in its low-cost manufacturing knowledge
 - Entrance to ASMPT low-cost supplier base in Asia for ASM AS
 - Enables ASM AS to enter ASMPT Asian marketing infrastructure

- **Cost is the most important topic in Back-end industry**
 - ASMPT provides the lowest cost solutions to customers
- **China is the fastest growing market in Back-end**
 - ASMPT has the largest customer base in China
- **LED is a strongly growing market with highest future growth potential**
 - ASMPT has the strongest position in the bonder market with over 80% market share
 - ASMPT offers the largest product portfolio in LED application
- **SMT provides further growth opportunities**
 - ASM AS is amongst the top three suppliers with the most advanced technology

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PERFORM! was about:

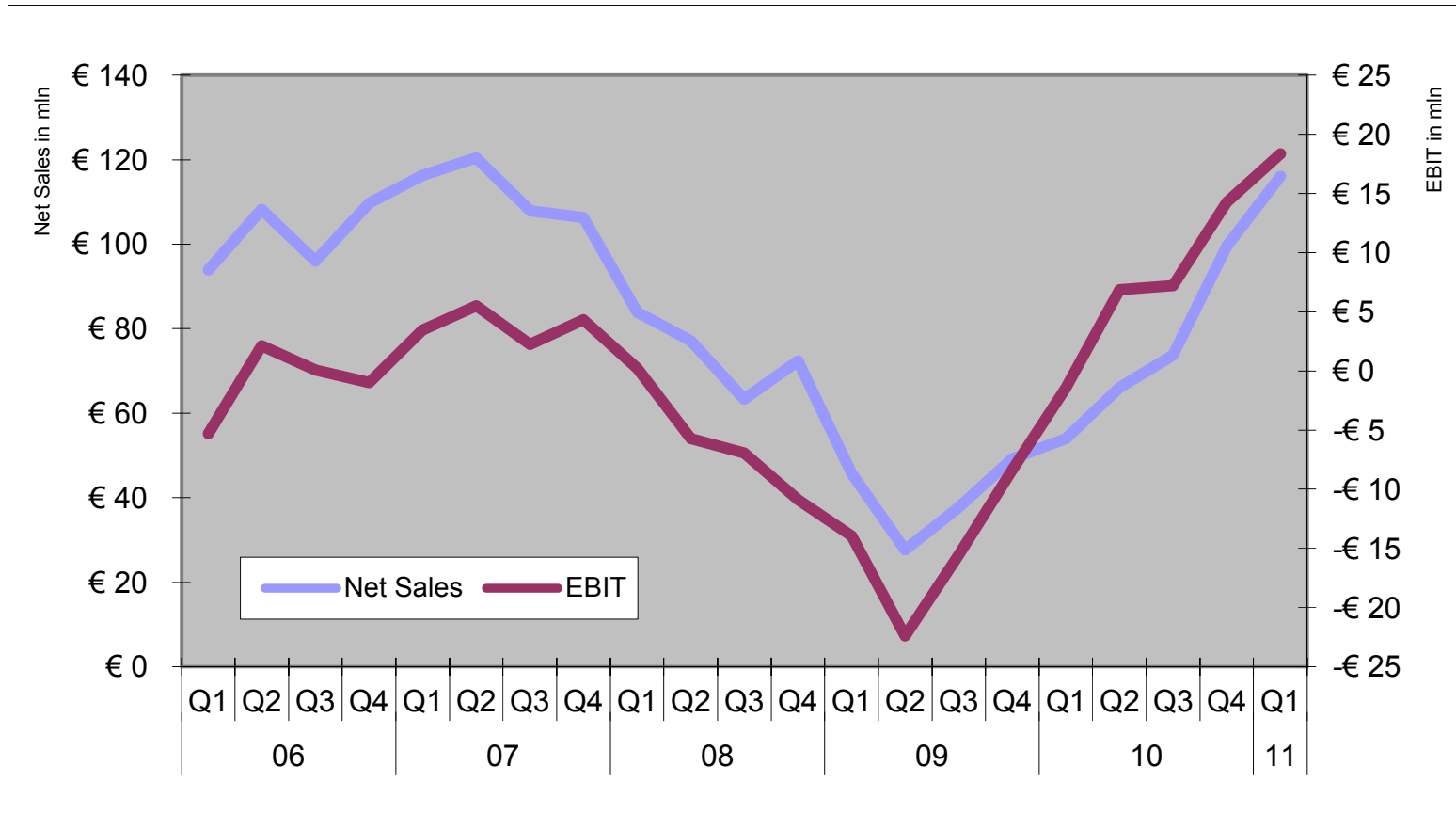
- Improving Front-End's **financial performance** through the cycles
- Changing organizational structure **from Regional to Global**
- Strengthening **Commercialization**
- **Execution & Operational Excellence**
- **Focus** and stronger **Accountability**
- Enhancing **Technology Leadership**

- **Significantly reduced the operating break-even level**
 - PERFORM! reduced cost level by 40% versus the Q4 2008 runrate
- **Manufacturing consolidated to 1 location in Singapore**
 - Adjacent to Back End facility
 - Reduction/closures took place in a market environment which showed substantial higher demand
- **Significantly streamlined R&D, Product Management and G&A functions**
- **Key Customer Penetrations made as result of stronger commercial organization**
- **Further savings opportunities in local sourcing and supply chain**

Front End gross margin up from 28% in Q4 2008 to \pm 40% presently

Restructuring expenses (in M Euro)	2009	2010	Total	Originally Communicated
Employee related	19.5	4.5	24.0	
Contract terminations	2.8	0.8	3.6	
Transition expenses	4.4	3.8	8.2	
Other out of pocket costs	4.4	2.1	6.5	
Total out of pocket costs	31.1	11.2	42.3	50.0-60.0
Impairments	4.6	0.0	4.6	10.0
Total restructuring expenses	35.7	11.2	46.9	60.0-70.0
Impairment inventories	24.2	0.0	24.2	20.0-25.0

FE continues profitability improvement with substantial reduction of Break even point

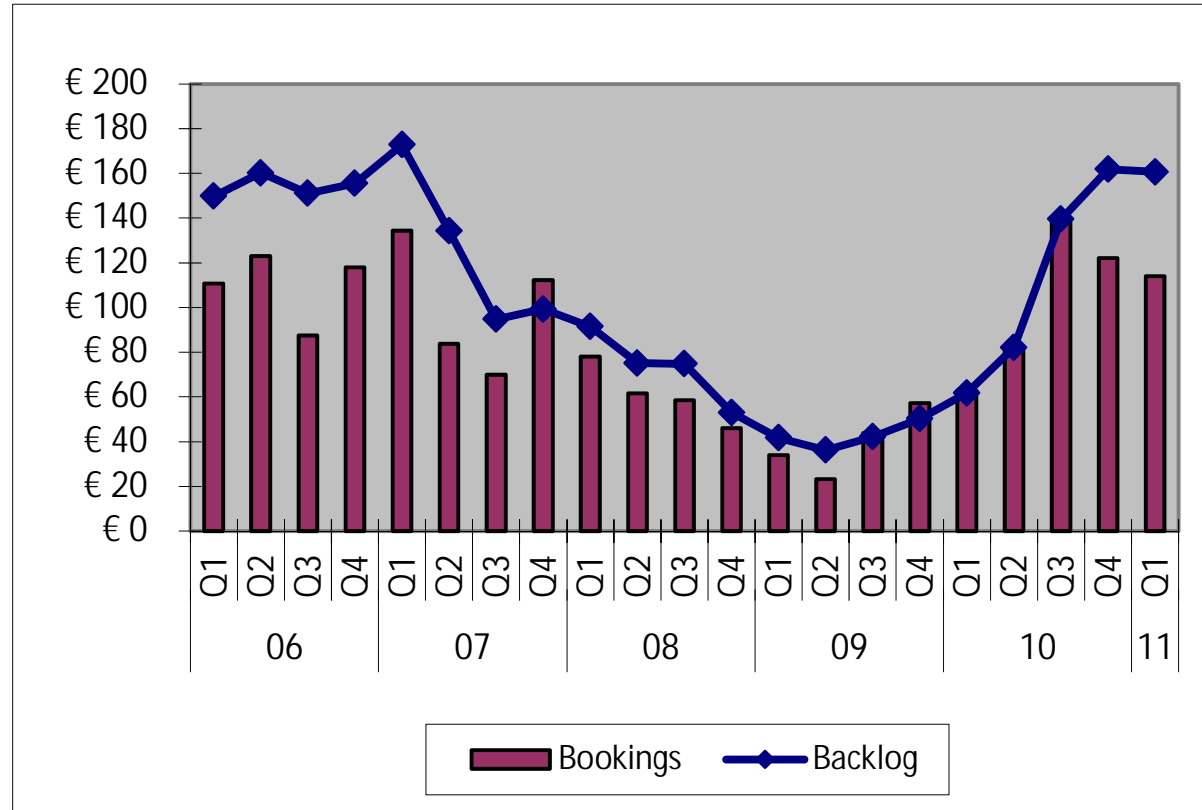


Strong quarter on quarter improvements

€ million	Full Year 2009	Full Year 2010	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011
Net Sales	160.4	293.4	54.0	66.1	73.8	99.6	116.1
Gross Margin <i>as % of sales</i>	32.9 20.5%	114.6 39.1%	18.7 34.6%	26.0 39.4%	29.3 39.8%	40.6 40.7%	45.6 39.2%
S, G & A	(58.9)	(51.0)	(11.7)	(11.3)	(12.8)	(15.2)	(15.5)
R & D	(34.4)	(36.5)	(8.3)	(7.8)	(9.2)	(11.2)	(11.3)
EBIT (excl. restructuring) <i>as % of sales</i>	(60.4) -37.7%	27.1 9.2%	(1.4) -2.5%	6.9 10.5%	7.3 9.8%	14.2 14.3%	18.7 16.1%
Bookings	158	405	63	82	139	120	121
Book-to-Bill	1.0	1.4	1.2	1.2	1.9	1.2	1.0
Restructuring expenses	(59.9)	(11.2)	(3.6)	(3.3)	(2.4)	(1.8)	-

Backlog increased in 2010 from €50m to €162m and remained stable in Q1 2011

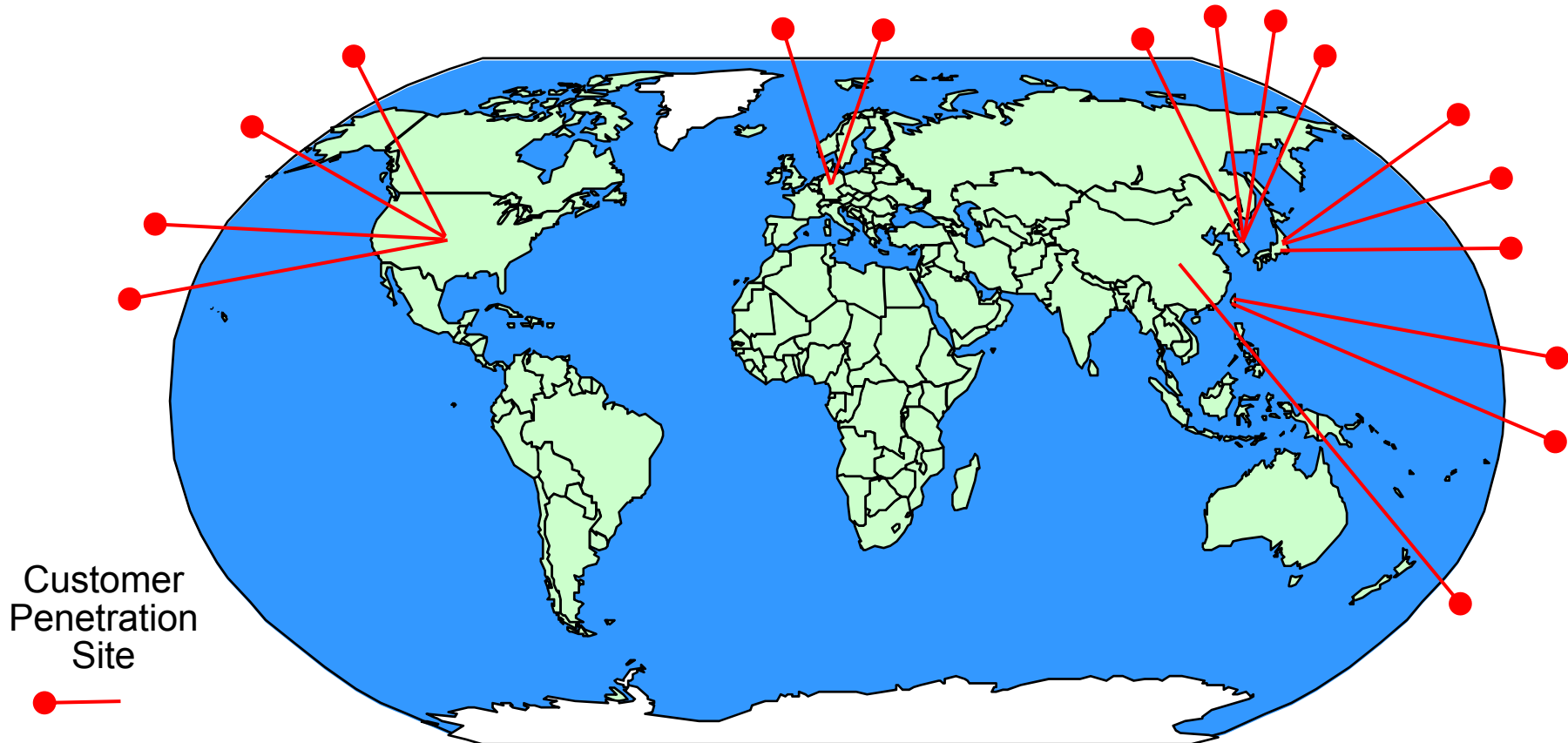
Book-to-Bill ratio in 2010 of 1.4 and 1.0 in Q1 2011



Market Requirements: 45nm → 32nm → 22nm → beyond

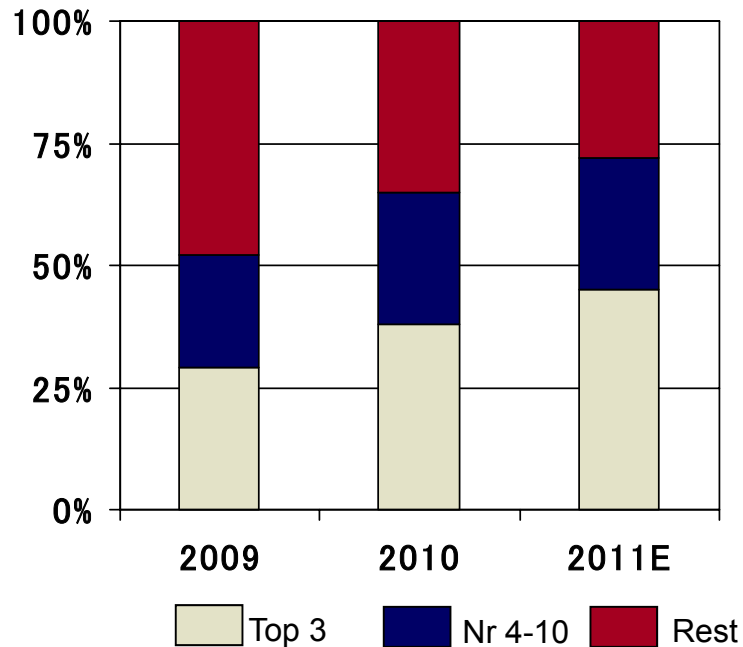
Process	Application	ASM Relative Positioning
ALD and PEALD <ul style="list-style-type: none"> ALD solution (Hafnium based oxide) PEALD Low temp dielectrics 	<ul style="list-style-type: none"> ALD key for High-k Gate technology Enables further miniaturisation of chips SDDP-application of PE-ALD 	<ul style="list-style-type: none"> ✓ #1 in the ALD market ✓ Qualified by nearly all Logic manufacturers ✓ Inroads into Memory with PEALD
Diffusion Furnace <ul style="list-style-type: none"> Advanced batch processing, Batch ALD process available Unique “dual reactor dual boat” design 	<ul style="list-style-type: none"> Smallest footprint per reactor Lowest Cost of Ownership 	<ul style="list-style-type: none"> ✓ Leading IC manufacturers are customers
Epitaxy <ul style="list-style-type: none"> Epitaxial for NMOS/PMOS 	<ul style="list-style-type: none"> Used in nanotechnology semiconductor fabrication Affordable method of high quality crystal growth 	<ul style="list-style-type: none"> ✓ ASM one of only two top vendors
PECVD <ul style="list-style-type: none"> Extreme low-k films 	<ul style="list-style-type: none"> Advanced intermetal dielectric film 	<ul style="list-style-type: none"> ✓ ASM one of only three top vendors in PE-CVD

Strong IP protected portfolio



- 16 Key customer penetrations
- Applications like ALD high-k, ALD metal, PEALD SDDP, PEALD spacer
- Memory, Foundry and Logic segment

Revenue as % Of Sales



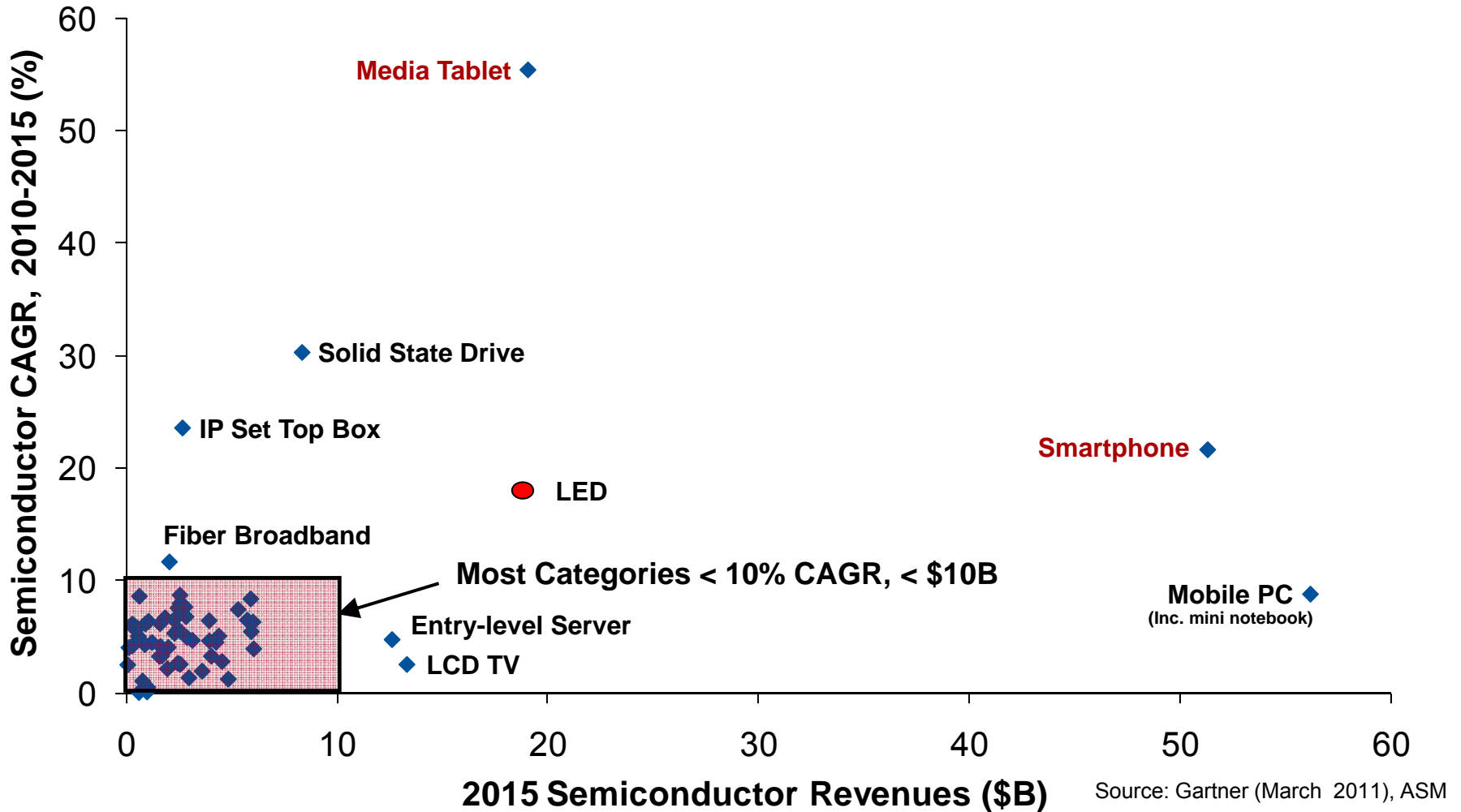
Key Developments:

- ✓ Diversification of customer base from Logic to Memory and Foundries
- ✓ Weight of Asia growing
- ✓ No customer above 20% of revenues
- ✓ Wider adoption by larger number of customers

- **ASMI Front-end started ALD technology in 1999 and has a strong time advantage over competition**
 - The ALD (and PEALD) technology is strongly patented
 - Further miniaturization will require more and more ALD/PEALD solutions
- **ASMI is one of the two leading suppliers of Low-k films**
 - ASMI is supplier to a few of the worlds leading IC manufacturers
- **In the EPI market ASMI is one of only two global suppliers**
 - Recent successes with applications for the analog/power market
- **ASM's Vertical Furnace is the only dual reactor, dual boat configuration available in the market providing lowest CoO and footprint per reactor**
 - Leading IC manufacturers are customers

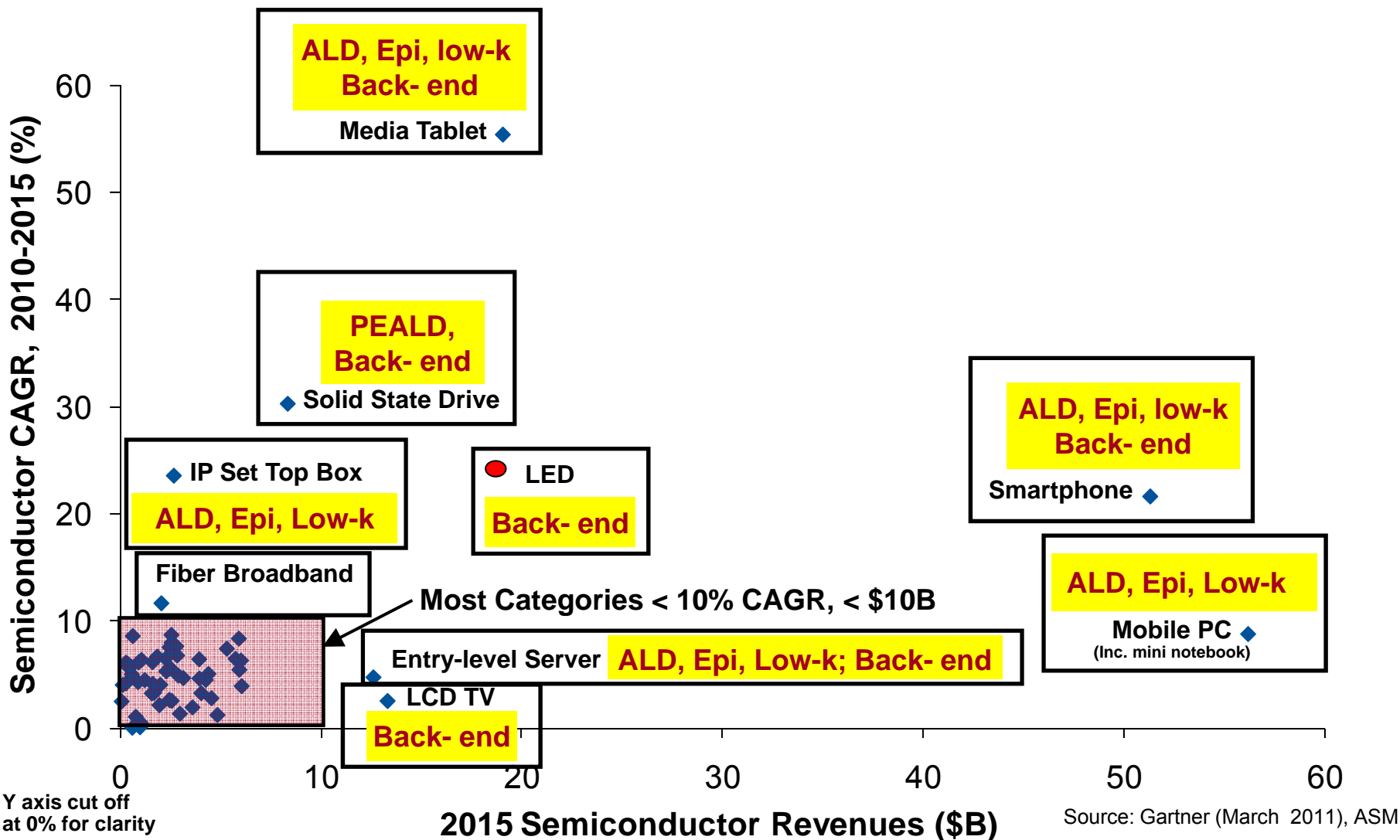
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Applications Driving Growth Through 2015



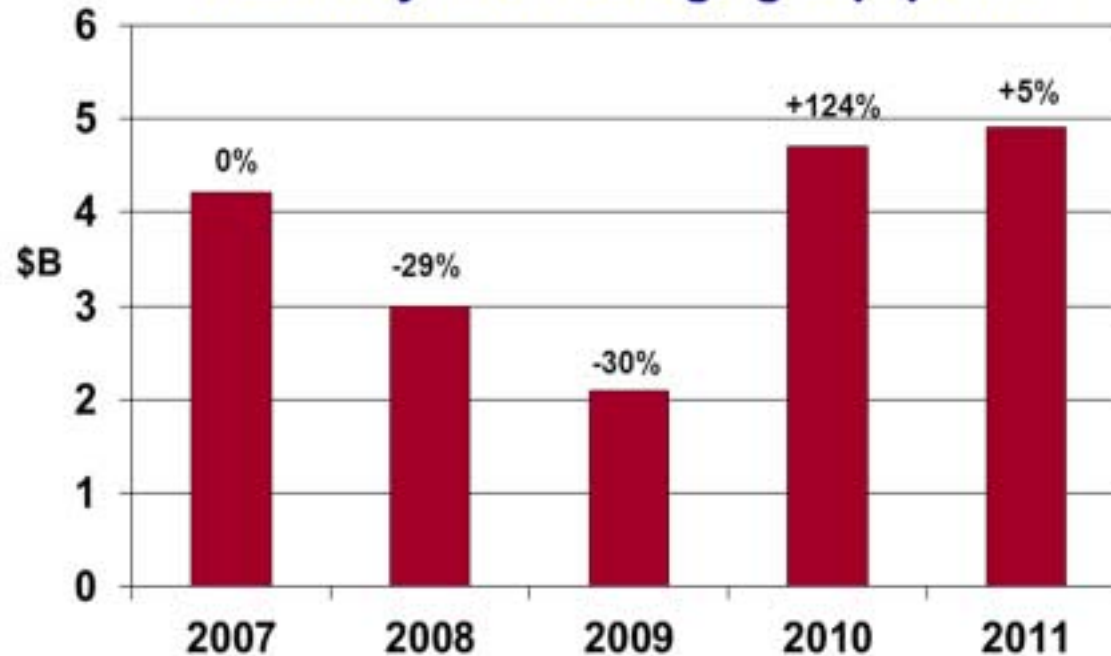
- Smartphones and Media Tablets Fuel Market
- LEDs driven by cost, thermal management, white light needs and brightness

Applications Driving Growth Through 2015



• **ASM's new technologies are well positioned to supply the equipment to manufacture semiconductors and LED in the high CAGR / high revenue segments**

Assembly and Packaging Equipment



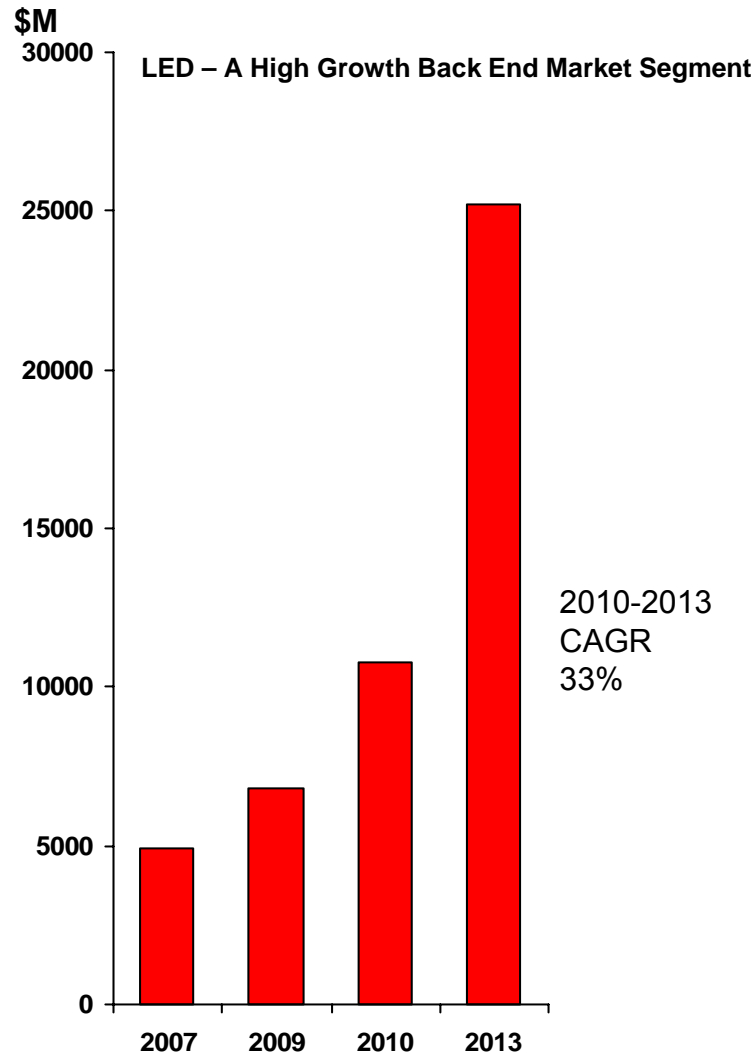
For IC equipment

- Market growth in 2011 5%
- Equipment for LED may not be fully reflected in Gartner forecast

For SMT (not shown in chart)

- Adds \$ 4 billion Served Available Market to ASM Back-end
- Improve market position in SE Asia
- Gross margin improvement plans
- Add low-end tools to product portfolio

Assembly and Packaging Equipment spending is expected to grow 5% in 2011

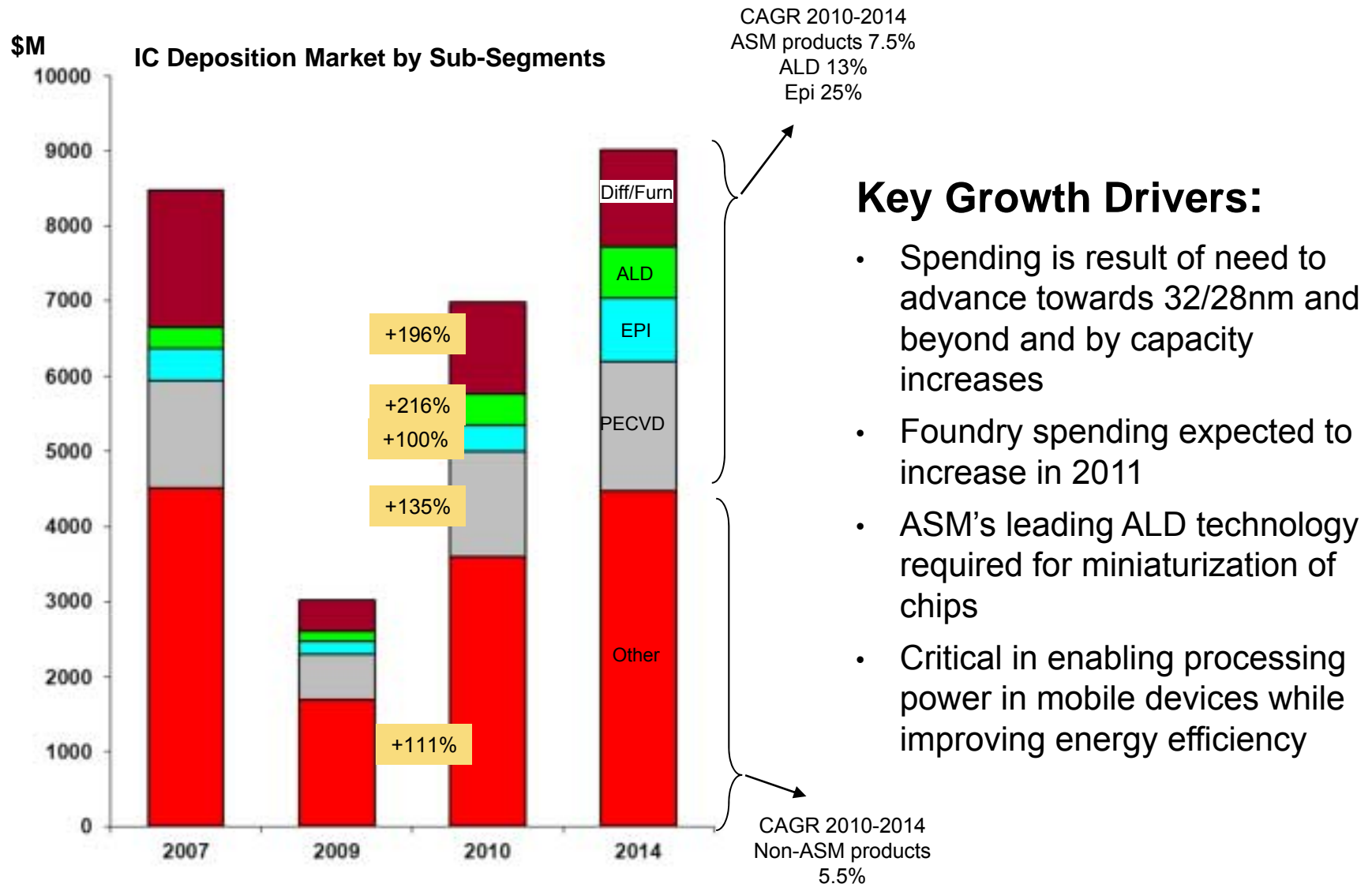


Key Growth Drivers:

For LED Equipment

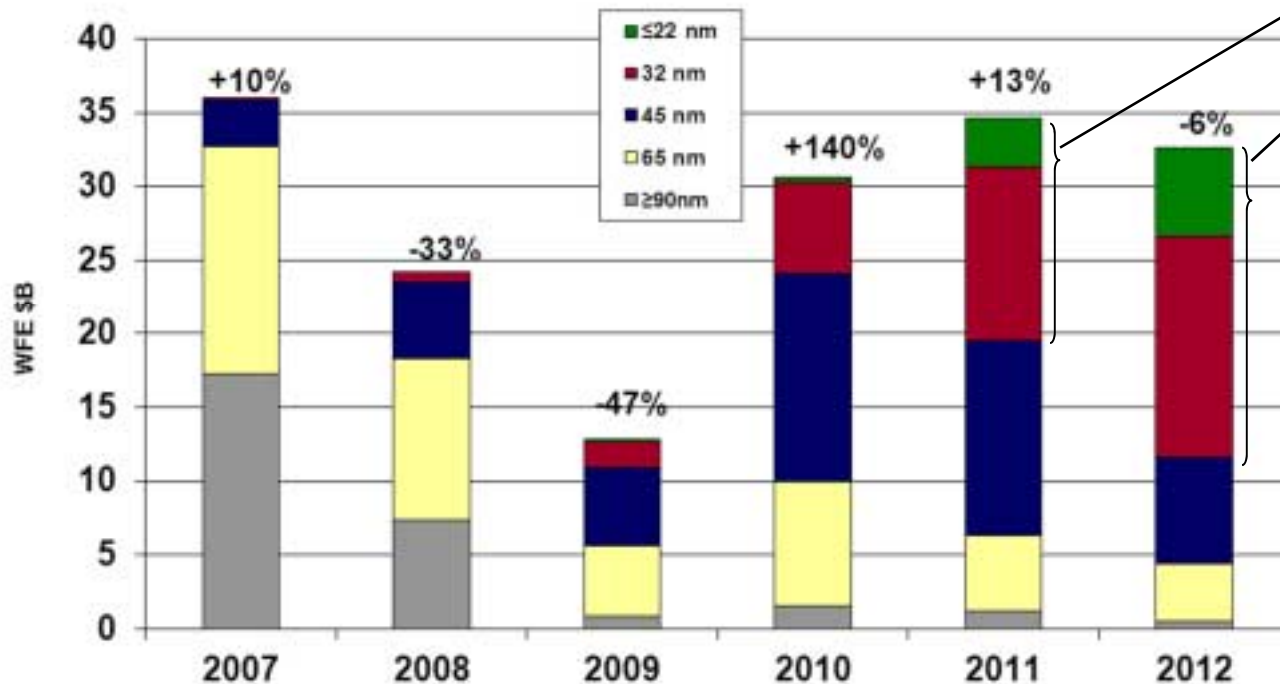
- LEDs provide an energy efficient, high quality and longer life alternative to traditional light sources
- LEDs replacing fluorescent lamps in backlighting of TVs and FPDs
- Years of strong growth expected when LEDs penetrate the large general illumination market

Source: Morgan Stanley Equity Research. (April 2011)



Source: VLSI Research April 15, 2011

Wafer Fab Equipment Forecast by technology node



Share of 32nm and 22nm of total Equipment spending strongly increasing in 2011-2012

- **Based upon the current backlog and our current visibility:**
 - For our Front-end operations we expect a single digit growth in the second quarter of 2011 at constant FX-rates, compared to the first quarter of 2011. We expect lower bookings for Q2 than in Q1, 2011. Despite this we expect 2011 to become a strong growth year for our Front-end operations
 - We expect for our Back-end operations a solid quarter given our strong backlog, assuming limited end-market demand disruption caused by the Japan earthquake

- **Unique semiconductor equipment vendor providing both Front End and Back End equipment**
- **Front End growth driven by leading positions in fast growth ALD, PEALD, EPI market segments**
- **Significant improvement in Front End profitability after successful implementation of PERFORM!**
- **Proposal to May 2011 Annual Shareholders Meeting to pay dividend**
- **Back End continues to be the top player in its segment**
- **Significant BE-growth opportunities in new areas like LED and adjacent areas like Surface Mount**